

REMARKS

By this amendment, Claim 1 has been amended to define the solvent in the adhesion promoting primer binder as being selected from butyl acetate, ethyl acetate, diacetoalcohol, and mixtures thereof. Support for the Amendment can be found at page 7, line 26 to page 8, line 2 of the specification. Applicants submit that the present Amendment should be entered by the Examiner because it does not raise any issues that would require further consideration and/or searching and would place the application in better form for appeal.

Reconsideration of this application, as amended, is respectfully requested.

Claims 1-12 stand rejected under 35 U.S.C. 102(e) as being anticipated by the Plassman reference (WO 01/98393). Claim 13 stands rejected under 35 U.S.C. 103(a) as being obvious over the same Plassman reference in view of the Nissan reference (Abstract of JP 04-239 537). Applicants respectfully submit that the references cited and relied upon by the Examiner neither disclose nor suggest the claimed invention.

The present invention is directed to an adhesion promoting primer comprising a curing component and a lacquer resin which can react with isocyanate groups. As presently claimed, the curing component consists of an addition product of (i) at least one organic polyisocyanate with an average NCO functionality of 2.5 to 5.0 and an isocyanate content of 8 to 27 wt.% and (ii) an alkoxysilane of a specified formula. The solvent is selected from butyl acetate, ethyl acetate, diacetoalcohol, and mixtures thereof. The specific solvents provide strong adhesion and effective protection in the inventive adhesion promoting primer, even after intensive weathering (see the last paragraph on page 10 and the examples in the specification).

Plassman discloses two-component coating compositions having a binder component and a hardener component. The Binder component has at least one active hydrogen containing compound. The hardener component has an isocyanate

Mo6675

- 5 -

functional compound and a silane oligomer. The Silane oligomer is the reaction product of the Isocyanate functional compound and a coupling agent. The coupling agent includes at least one alkoxysilane functional group, and at least one isocyanate reactive group selected from the group. The silane oligomer includes at least two free Isocyanate groups.

Nissan discloses a transparent resin with improved surface scratch resistance of the surface. A primer layer is provided on the surface of a transparent resin substrate and a thin film containing at least one kind of inorganic material and amorphous carbon and having 1-5 micron film thickness is applied thereon.

In the present invention, Applicants sought to provide a primer for silicon-containing coatings on polymer substrates which enables good adhesion between the organic modified silicon-containing inorganic coating and the surface of the polymer substrate and which does not lead either to optical damage or to instability in the presence of water. Applicants discovered the inventive solvent-containing two-component polyurethane binders, where the solvent is selected from butyl acetate, ethyl acetate, diacetoalcohol, and mixtures thereof. The specific solvents provide strong adhesion and effective protection in the inventive adhesion promoting primer, even after intensive weathering which contain a curing component containing of an addition product of a polyisocyanate and an alkoxysilane and a lacquer resin which can react with isocyanate groups can be used as primers. As such, the inventive solvent-containing two-component system represents an ideal combination of very high adhesion between a polymer substrate and an inorganic coating and very good weather resistance. (See specification at page 2, lines 14-25, page 10, and the examples).

Plassman only makes a general reference to a laundry list of solvent types that can be used in the disclosed coating compositions (page 11, lines 8-11). However, "a 'laundry list' disclosure of every possible moiety does not constitute a written description of every species in a genus because it would not 'reasonably lead

those skilled in the art' to any particular species." MPEP § 2163 quoting Fujiikawa v. Wattanasin, 93 F.3d 1559, 1571, 39 USPQ2d 1895, 1905 (Fed. Cir. 1996).


In order to anticipate a claim, a prior art reference must disclose every limitation in a claim. As Plassman does not disclose the specific solvents in the amended claims, it does not anticipate the claims and the rejection under 35 U.S.C. 102(e) should be withdrawn.

Further, there is no suggestion in Plassman regarding the surprisingly good properties found when the solvent is selected from butyl acetate, ethyl acetate, diacetoalcohol, and mixtures thereof, in the inventive adhesion promoting primer. Nissan also provides no mention or motivation to use the specific solvents. As neither of Plassman or Nissan, alone or in combination, provide any teaching, suggestion or motivation to use the specific solvents in the amended claims, the claims are not obvious over the cited references and the rejection under 35 U.S.C. 103(a) should be withdrawn.

In view of the amendments and remarks presented herein, it is submitted that this application is in condition for allowance and such action is respectfully requested.

Respectfully submitted,

By


Gary Matz
Agent for Applicants
Reg. No. 45,504

Bayer Polymers LLC
100 Bayer Road
Pittsburgh, Pennsylvania 15205-9741
(412) 777-3897
FACSIMILE PHONE NUMBER:
(412) 777-3902

/jme/GM/GM0058

Mo6675

- 7 -